March 13, 2003 Certified Mail #9058 7760

Francis Finn
Coordinator
Magnetech Industrial Services, Inc.
1825 Summer Street
Hammond, Indiana 46320

Re: Registered Operation Status,
089-16606-00477

Dear Mr. Finn:

The application from Magnetech Industrial Services, Inc. received on December 20, 2002 has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following Blasting and Heat Treating Process, located at 1825 Summer Street, Hammond, Indiana, is classified as registered:

(a) Black Beauty/Glass Bead Blasting Booth, with a maximum capacity of 300 lbs/hr of Black Beauty Blasting Sand or 150 lbs/hr of Glass Bead, using a Downflo dust collector for control, and exhausting into the building.

(b) Three (3) oven processes one (1) Ace Oven, one (1) Michigan Oven #1735 and one (1) Michigan Oven # 3074, with a maximum design capacity of 2.2 MMBtu/hr heat input, burning natural gas only and venting through their own stacks without controls.

The following conditions shall be applicable:

Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following:

(a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

Pursuant to Hammond Air Quality Control Ordinance 3522 (as amended), the source will be required to annually submit a statement of the actual emissions of all federally regulated pollutants from the source, for the purpose of source classification.

Pursuant to 326 IAC 6-3-2 (Process Operations)
The particulate matter (PM) from the Blasting Booth shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The limitation based on this rule is 0.722 pounds/hour, which is less than the potentials before controls. The dust collector shall be in operation at all times the blasting process is in operation, in order to comply with this limit.

Pursuant to 326 IAC 4-2-2, all incinerators shall comply with the following requirements:

(1) Consist of primary and secondary chambers or the equivalent.
(2) Be equipped with a primary burner unless burning only wood products.
(3) Comply with 326 IAC 5-1 and 326 IAC 2.
(4) Be maintained, operated, and burn waste in accordance with the manufacturer's specifications
(5) Not emit particulate matter in excess of the following:
Five-tenths (0.5) pound of particulate matter per one thousand (1,000) pounds of dry exhaust gas under standard conditions corrected to fifty percent (50%) excess air for incinerators with solid waste capacity less than two hundred (200) pounds per hour.
(6) If any of the requirements of subdivisions (1) through (5) are not met, then the owner or operator shall stop charging the incinerator until adjustments are made that address the underlying cause of the deviation.

This registration is the first registration issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Quality
100 North Senate Avenue
Indianapolis, IN 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue
Hammond, Indiana 46320

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Ronald Novak, Director
Hammond Department of Environmental Management

KM

cc: Permit Administrator- Mindy Hahn

Registration
Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3).

Company Name:	**Magnetech Industrial Services, Inc.**
Address:	**1825 Summer Street**
City:	**Hammond**
Authorized Individual:	**Francis Finn**
Phone #:	**(219) 937-0100**
Registration #:	**089-16606-00477**

I hereby certify that Magnetech Industrial Services, Inc. is still in operation and is in compliance with the requirements of Registration 089-16606-00477.

Name (typed):	**Francis Finn**
Title:	**Coordinator**
Signature:	
Date:	

Indiana Department of Environmental Management
Office of Air Quality
and
Hammond Department of Environmental Management
Air Pollution Control Division

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name:	Magnetech Industrial Services, Inc.
Source Location:	1825 Summer Street, Hammond, Indiana
County:	Lake
SIC Code:	7694 – Armature Rewinding Shops
Operation Permit No.:	089-16606-00477
Permit Reviewer:	Kristina Massey

The Hammond Department of Environmental Management (HDEM) has reviewed an application from Magnetech Industrial Services, Inc. relating to the operation of one (1) blasting booth, for either glass bead or abrasive; and three (3) ovens, two (2) for the drying of moisture out of electrical equipment and one (1) for removing paint and varnish from electrical motors and components.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) Black Beauty/Glass Bead Blasting Booth, with a maximum capacity of 300 lbs/hr of Black Beauty Blasting Sand or 150 lbs/hr of Glass Bead, using a Downflo dust collector for control, and exhausting into the building.

(b) Three (3) oven processes one (1) Ace Oven, one (1) Michigan Oven #1735 and one (1) Michigan Oven # 3074, with a maximum design capacity of 2.2 MMBtu/hr heat input, burning natural gas only and venting through their own stacks without controls.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) OP - 02086, issued on February 21, 2002; and

(b) OP - 02087, issued on February 21, 2002.

All conditions from previous approvals were incorporated into this permit.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
Ace Heat Clng	Ace Heat Clng	30	0.83	800	600
Michigan 1735	Michigan 1735	30	0.83	490	275
Michigan 3074	Michigan 3074	30	1.0	1800	225
Blasting Booth	Blasting Booth	Vents Inside		600	77

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Director that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on December 20, 2002.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (four (4) pages).

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	21.54
PM-10	14.90
SO_2	0.002
VOC	0.02
CO	0.29
NO_x	0.35

The potential to emit (as defined in 326 IAC 2-7-1(29) of Particulate Matter (PM) and Particulate Matter less than 10 Microns (PM10) are less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7. The potential to emit is greater than 5 tons/year and less than 25 tons per year of PM and PM10 therefore pursuant to 326 IAC 2-5, a Registration is required.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2001 emission data.

Pollutant	Actual Emissions (tons/year)
PM	0.0067
PM-10	0.0048
SO_2	0.0000
VOC	0.0003
CO	0.0042
NO_x	0.0050
HAP (specify)	0

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM-10	Moderate nonattainment
SO_2	Primary nonattainment
NO_2	Attainment/unclassifiable
Ozone	Severe nonattainment
CO	Attainment/unclassifiable
Lead	Attainment/unclassifiable

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as nonattainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

(b) Lake County has been classified as nonattainment for Particulate Matter (PM) and Particulate Matter less than 10 microns (PM10). Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	0.249
PM10	0.191
SO_2	0.002
VOC	0.019
CO	0.294
NO_x	0.350

(a) This existing source is **not** a major stationary source because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year, and it is not in one of the 28 listed source categories.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the HDEM.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

An application for the Ace Cleaning Oven was received on December 18, 1989, as an already existing unit. The Ace Cleaning Oven does not meet the requirements of 40 CFR Part 60 Subpart CCCC, since it was installed prior to November 30, 1999.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Lake County and the potential to emit VOCs is less than ten (10) tons per year. The source is not one of the twenty-eight (28) listed sources and its potential to emit PM10 is less than one-hundred (100) tons per year including fugitive emissions, therefore, 326 IAC 2-6 does not apply.

Pursuant to Hammond Air Quality Control Ordinance 3522 (as amended), the source will be required to annually submit a statement of the actual emissions of all federally regulated pollutants from the source, for the purpose of source classification.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of twenty percent (20%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 4-2-2

The Ace Heat Cleaning Oven is used to burn off paint from motors and other parts. This oven has a primary and secondary chamber, and is equipped with an afterburner, therefore, the requirements of 326 4-2-2 (Incinerators) applies.

Pursuant to 326 IAC 4-2-2 All incinerators shall comply with the following requirements:

(1) Consist of primary and secondary chambers or the equivalent.
(2) Be equipped with a primary burner unless burning only wood products.
(3) Comply with 326 IAC 5-1 and 326 IAC 2.
(4) Be maintained, operated, and burn waste in accordance with the manufacturer's specifications
(5) Not emit particulate matter in excess of the following:
Five-tenths (0.5) pound of particulate matter per one thousand (1,000) pounds of dry exhaust gas under standard conditions corrected to fifty percent (50%) excess air for incinerators with solid waste capacity less than two hundred (200) pounds per hour.

(6) If any of the requirements of subdivisions (1) through (5) are not met, then the owner or operator shall stop charging the incinerator until adjustments are made that address the underlying cause of the deviation.

326 IAC 6-1-2 (Particulate Emissions Limitations)

These facilities are not subject to 326 IAC 6-1-2 (Particulate Emissions Limitations), because the source does not have the potential to emit 100 tons/year or actual emissions of 10 tons/year of particulate matter.

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from the Blasting Booth shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$

where E = rate of emission in pounds per hour and

P = process weight rate in tons per hour

The limitation based on this rule is 0.722 pounds/hour, which is less than the potentials before controls. The dust collector shall be in operation at all times the blasting process is in operation, in order to comply with this limit.

Conclusion

The operation of this blasting and heat-treating process shall be subject to the conditions of the attached proposed Registration and local operating permit.

ALABAMA POWER LAW (CDS)/EIS CALCULATIONS

Magnetech Industrial Services, Inc.
1825 Summer Street
Hammond, Indiana 46320

PLANT ID NO: N/A
INSP DATE:
CALC DATE: 1/27/03

CALCULATIONS BY: Kristina Massey

YEAR OF DATA: **REVIEW**

NO. OF POINTS: 3

NOTES
EF: EMISSION FACTOR
CE: CONTROL EFFICIENCY
MDR: MAXIMUM DESIGN RATE
MDC: MAXIMUM DESIGN CAPACITY
Ts: STACK DISCHARGE TEMPERATURE
UNITS FOR EMISSIONS ARE IN (TPY) EXCEPT WHERE GIVEN

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POINT ID: 001 OVEN PROCESSES:
Ace Heat Cleaning/Burnout Oven
CNTRL DEV: Equipped with an afterburner chamber.
(Process)

MDR (T/hr): 0.03
YEARLY PROD (T/yr): 0.00

STACK ID (DIAM:HEIGHT): 10" : 20'
FLOWRATE (ACFM): 800
Ts(°F): 600

PERMITTED OPERATING HRS: **8760** hr/yr

SCC NO. 3-04-002-32

			POTENTIAL EMISSIONS						**ALLOWABLE**		**COMPANY ACTUAL**	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE	AFTER
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	**(TPY)**	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	13.75	0.986	0.4125	9.9000	**1.8068**	0.0058	0.0253	0.0017	ACFM = 800		0.0000	0.0000
PM10	8.20	0.976	0.2460	5.9040	**1.0775**	0.0059	0.0259	0.0017	DSCFM = (530*ACFM) /		0.0000	0.0000
SOx	0	0	0.0000	0.0000	**0.0000**	0.0000	0.0000	N/A	(460+Ts) = 400		0.0000	0.0000
NOx	0	0	0.0000	0.0000	**0.0000**	0.0000	0.0000	N/A	1 lb = 12.38 cft air		0.0000	0.0000
VOC	0	0	0.0000	0.0000	**0.0000**	0.0000	0.0000	N/A	400/12.38 = 32.31		0.0000	0.0000
CO	0	0	0.0000	0.0000	**0.0000**	0.0000	0.0000	N/A	32.31 lbs/min = 1939 lb/hr		0.0000	0.0000
LEAD	0	0	0.0000	0.0000	**0.0000**	0.0000	0.0000	N/A	0.5*1939/1000 = 0.969		0.0000	0.0000

C.E. for PM:
13.75 lbs particulates/Ton of Charge
13.75 X (1-CE) = 0.2
(1-CE) = 0.2/13.75 = 0.0145
CE = 98.6%

C.E. for PM10:
8.2 lbs particulates/Ton of Charge
8.2 X (1-CE) = 0.2
(1-CE) = 0.2/8.2 = 0.0244
CE = 97.6%

Hammond Air Quality Control Ordinance No. 3522 (as amended)
326 IAC 4-2-2-(8)(B)

OVEN PROCESSES:
Ace Heat Cleaning/Burnout Oven
(In-Process Fuel Combustion)

MDC (mmBtu/hr): 0.8
MDR (mmcft/hr): 0.0008
HEAT CONTENT (Btu/cft): 1,000
QTY BURNED (mmcft/yr): 0.099

STACK ID (DIAM:HEIGHT): 10" : 30'
FLOWRATE (ACFM): 800
Ts(°F): 600

PERMITTED OPERATING HRS: **8760** hr/yr

SCC NO. 1-02-006-03

			POTENTIAL EMISSIONS						**ALLOWABLE**		**COMPANY ACTUAL**	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE	AFTER
POLLUTANT	EF(lbs/mmcft)	CE (%)	(lbs/hr)	(lbs/day)	**(TPY)**	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	7.6	0	0.0061	0.1459	**0.0266**	0.0061	0.0266	0.0018	0.0061	0.0266	0.0004	0.0004
PM10	7.6	0	0.0061	0.1459	**0.0266**	0.0061	0.0266	0.0018	0.0061	0.0266	0.0004	0.0004
SOx	0.6	0	0.0005	0.0115	**0.0021**	0.0005	0.0021	N/A	0.0005	0.0021	0.0000	0.0000
NOx	100	0	0.0800	1.9200	**0.3504**	0.0800	0.3504	N/A	0.0800	0.3504	0.0050	0.0050
VOC	5.5	0	0.0044	0.1056	**0.0193**	0.0044	0.0193	N/A	0.0044	0.0193	0.0003	0.0003
CO	84	0	0.0672	1.6128	**0.2943**	0.0672	0.2943	N/A	0.0672	0.2943	0.0042	0.0042
LEAD	0.0005	0	0.0000	0.0000	**0.0000**	0.0000	0.0000	N/A	0.0000	0.0000	0.0000	0.0000

Hammond Air Quality Control Ordinance No. 3522 (as amended)

OVEN PROCESSES:

Michigan Oven #1735 (Motor Shop) MDC (mmBtu/hr): 0.6 HEAT CONTENT (Btu/cft): 1,000 STACK ID (DIAM:HEIGHT): 0.67' : 30'

(In-Process Fuel Combustion) MDR (mmcft/hr): 0.0006 QTY BURNED (mmcft/yr): 1.248 FLOWRATE (ACFM): 490

Ts(°F): 275

PERMITTED OPERATING HRS: **8760** hr/yr

			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
SCC NO. 1-02-006-03			BEFORE CONTROLS			AFTER CONTROLS					BEFORE	AFTER
POLLUTANT	EF(lbs/mmcft)	CE (%)	(lbs/hr)	(lbs/day)	**(TPY)**	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	7.6	0	0.0046	0.1094	**0.0200**	0.0046	0.0200	0.0015	0.0046	0.0200	0.0047	0.0047
PM10	7.6	0	0.0046	0.1094	**0.0200**	0.0046	0.0200	0.0015	0.0046	0.0200	0.0047	0.0047
SOx	0.6	0	0.0004	0.0086	**0.0016**	0.0004	0.0016	N/A	0.0004	0.0016	0.0004	0.0004
NOx	100	0	0.0600	1.4400	**0.2628**	0.0600	0.2628	N/A	0.0600	0.2628	0.0624	0.0624
VOC	5.5	0	0.0033	0.0792	**0.0145**	0.0033	0.0145	N/A	0.0033	0.0145	0.0034	0.0034
CO	84	0	0.0504	1.2096	**0.2208**	0.0504	0.2208	N/A	0.0504	0.2208	0.0524	0.0524
LEAD	0.0005	0	0.0000	0.0000	**0.0000**	0.0000	0.0000	N/A	0.0000	0.0000	0.0000	0.0000

Hammond Air Quality Control Ordinance No. 3522 (as amended)

OVEN PROCESSES:

Michigan Oven #3074 (Magnet Shop) MDC (mmBtu/hr): 0.8 HEAT CONTENT (Btu/cft): 1,000 STACK ID (DIAM:HEIGHT): 1' : 50'

(In-Process Fuel Combustion) MDR (mmcft/hr): 0.0008 QTY BURNED (mmcft/yr): 1.664 FLOWRATE (ACFM): 1,800

Ts(°F): 225

PERMITTED OPERATING HRS: **8760** hr/yr

			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
SCC NO. 1-02-006-03			BEFORE CONTROLS			AFTER CONTROLS					BEFORE	AFTER
POLLUTANT	EF(lbs/mmcft)	CE (%)	(lbs/hr)	(lbs/day)	**(TPY)**	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	7.6	0	0.0061	0.1459	**0.0266**	0.0061	0.0266	0.0005	0.0061	0.0266	0.0063	0.0063
PM10	7.6	0	0.0061	0.1459	**0.0266**	0.0061	0.0266	0.0005	0.0061	0.0266	0.0063	0.0063
SOx	0.6	0	0.0005	0.0115	**0.0021**	0.0005	0.0021	N/A	0.0005	0.0021	0.0005	0.0005
NOx	100	0	0.0800	1.9200	**0.3504**	0.0800	0.3504	N/A	0.0800	0.3504	0.0832	0.0832
VOC	5.5	0	0.0044	0.1056	**0.0193**	0.0044	0.0193	N/A	0.0044	0.0193	0.0046	0.0046
CO	84	0	0.0672	1.6128	**0.2943**	0.0672	0.2943	N/A	0.0672	0.2943	0.0699	0.0699
LEAD	0.0005	0	0.0000	0.0000	**0.0000**	0.0000	0.0000	N/A	0.0000	0.0000	0.0000	0.0000

Hammond Air Quality Control Ordinance No. 3522 (as amended)

Totals for the Ace Heat Cleaning/Burnout Oven & Michigan Ovens #1735 & #3074:

	POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
	BEFORE CONTROLS			AFTER CONTROLS					BEFORE	AFTER
POLLUTANT	(lbs/hr)	(lbs/day)	**(TPY)**	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	0.4186	10.0459	1.8334	0.0119	0.0519	0.0035	0.0119	0.0519	0.0004	0.0004
PM10	0.2521	6.0499	1.1041	0.0120	0.0525	0.0035	0.0120	0.0525	0.0004	0.0004
SOx	0.0005	0.0115	0.0021	0.0005	0.0021	N/A	0.0005	0.0021	0.0000	0.0000
NOx	0.0800	1.9200	0.3504	0.0800	0.3504	N/A	0.0800	0.3504	0.0050	0.0050
VOC	0.0044	0.1056	0.0193	0.0044	0.0193	N/A	0.0044	0.0193	0.0003	0.0003
CO	0.0672	1.6128	0.2943	0.0672	0.2943	N/A	0.0672	0.2943	0.0042	0.0042
LEAD	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0.0000	0.0000	0.0000	0.0000

*This point has potential emissions below the State's registration thresholds.

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POINT ID: 003 MDR (lb/hr): 300.00 STACK ID (DIAM:HEIGHT): (Vents within bldg.)
Black Beauty Blasting Booth w/Clemco YEARLY PROD (lb/yr): 126000 FLOWRATE (ACFM): 600
3 X 3 Hopper Recovery System Ts(°F): 77
Including one (1) C64 Dust PERMITTED OPERATING HRS: **8760** hr/yr
Collector (99%)

			POTENTIAL EMISSIONS						COMPANY ACTUAL	
	(E.F. calc. below)		BEFORE CONTROLS			AFTER CONTROLS			BEFORE	AFTER
POLLUTANT	EF(lb/lb)	CE (%)	(lbs/hr)	(lbs/day)	**(TPY)**	(lbs/hr)	(TPY)	(gr/dscf)	CONTROLS	CONTROLS
PM	0.01	0.99	3.0000	72.0000	**13.1400**	0.0300	0.1314	0.0059	0.6300	0.0063
PM10	0.007	0.99	2.1000	50.4000	**9.1980**	0.0210	0.0920	0.0041	0.4410	0.0044
SOx	0	0	0.0000	0.0000	**0.0000**	0.0000	0.0000	N/A	0.0000	0.0000
NOx	0	0	0.0000	0.0000	**0.0000**	0.0000	0.0000	N/A	0.0000	0.0000
VOC	0	0	0.0000	0.0000	**0.0000**	0.0000	0.0000	N/A	0.0000	0.0000
CO	0	0	0.0000	0.0000	**0.0000**	0.0000	0.0000	N/A	0.0000	0.0000
LEAD	0	0	0.0000	0.0000	**0.0000**	0.0000	0.0000	N/A	0.0000	0.0000

*This point has potential emissions above the State's registration thresholds.

E.F. found in the Air Quality Permits Handbook Volume I, Section 3 Confined Abrasive Blasting Cabinets/Rooms,
3.3.1 Emission Factors: Table 3-2. Emission Factor for Abrasives, page 3-12
Grit: 0.70 lb PM10/lb PM and 0.010 lb PM/lb Abrasive

(PM) E.F. = 0.010 lb PM/lb Black Beauty
(PM10) E.F. = (0.010 lb PM/lb Black Beauty) * (0.70 lb PM10/lb PM) = 0.007 lb PM10/lb Black Beauty

*MDR is based on lbs of Abrasive (Black Beauty) used/hr.

****

POINT ID: 003;Segment 2 MDR (lb/hr): 150.00 STACK ID (DIAM:HEIGHT): (Vents within bldg.)
Blasting Booth w/ Glass Beads YEARLY PROD (lb/yr): 1000 FLOWRATE (ACFM): 600
3 X 3 Hopper Recovery System Ts(°F): 77
Including one (1) C64 Dust PERMITTED OPERATING HRS: **8760** hr/yr
Collector (99%)

			POTENTIAL EMISSIONS						COMPANY ACTUAL	
	(E.F. calc. below)		BEFORE CONTROLS			AFTER CONTROLS			BEFORE	AFTER
POLLUTANT	EF(lb/lb)	CE (%)	(lbs/hr)	(lbs/day)	**(TPY)**	(lbs/hr)	(TPY)	(gr/dscf)	CONTROLS	CONTROLS
PM	0.01	0.99	1.5000	36.0000	**6.5700**	0.0150	0.0657	0.0030	0.0050	0.0001
PM10	0.007	0.99	1.0500	25.2000	**4.5990**	0.0105	0.0460	0.0021	0.0035	0.0000
SOx	0	0	0.0000	0.0000	**0.0000**	0.0000	0.0000	N/A	0.0000	0.0000
NOx	0	0	0.0000	0.0000	**0.0000**	0.0000	0.0000	N/A	0.0000	0.0000
VOC	0	0	0.0000	0.0000	**0.0000**	0.0000	0.0000	N/A	0.0000	0.0000
CO	0	0	0.0000	0.0000	**0.0000**	0.0000	0.0000	N/A	0.0000	0.0000
LEAD	0	0	0.0000	0.0000	**0.0000**	0.0000	0.0000	N/A	0.0000	0.0000

*This point has potential emissions above the State's registration thresholds.

E.F. found in the Air Quality Permits Handbook Volume I, Section 3 Confined Abrasive Blasting Cabinets/Rooms,
3.3.1 Emission Factors: Table 3-2. Emission Factor for Abrasives, page 3-12
Grit: 0.70 lb PM10/lb PM and 0.010 lb PM/lb Abrasive

(PM) E.F. = 0.010 lb PM/lb Glass Bead
(PM10) E.F. = (0.010 lb PM/lb Glass bead) * (0.70 lb PM10/lb PM) = 0.007 lb PM10/lb Glass Bead

*MDR is based on lbs of Glass Bead used/hr.

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Total for Blasting Booth

	POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
	BEFORE CONTROLS			AFTER CONTROLS					BEFORE	AFTER
POLLUTANT	(lbs/hr)	(lbs/day)	**(TPY)**	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	4.5000	108.0000	19.7100	0.0450	0.1971	0.0089	0.7220	3.1624	0.6350	0.0064
PM10	3.1500	75.6000	13.7970	0.0315	0.1380	0.0062	0.5054	2.2137	0.4445	0.0044
SOx	0.0000	0.0000	0.0000	0.0000	0.0000	#VALUE!	0.0000	0.0000	0.0000	0.0000
NOx	0.0000	0.0000	0.0000	0.0000	0.0000	#VALUE!	0.0000	0.0000	0.0000	0.0000
VOC	0.0000	0.0000	0.0000	0.0000	0.0000	#VALUE!	0.0000	0.0000	0.0000	0.0000
CO	0.0000	0.0000	0.0000	0.0000	0.0000	#VALUE!	0.0000	0.0000	0.0000	0.0000
LEAD	0.0000	0.0000	0.0000	0.0000	0.0000	#VALUE!	0.0000	0.0000	0.0000	0.0000

***This source is class Registration according to potential emissions.**

326 IAC 6-3-2
PM10 HAQC 3522 (as amended)

The booth can only use one type of abrasive at a time, therefore the allowable is based on one abrasive.
PM10 limit based on 70% of PM limit as reflected in the EF calculation.

Plant-wide Totals:

	POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
	BEFORE CONTROLS			AFTER CONTROLS					BEFORE	AFTER
POLLUTANT	(lbs/hr)	(lbs/day)	**(TPY)**	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	4.9186	118.0459	21.5434	0.0569	0.2490	0.0123	0.7339	3.2143	0.6354	0.0067
PM10	3.4021	81.6499	14.9011	0.0435	0.1905	0.0097	0.5174	2.2661	0.4449	0.0048
SOx	0.0005	0.0115	0.0021	0.0005	0.0021	N/A	0.0005	0.0021	0.0000	0.0000
NOx	0.0800	1.9200	0.3504	0.0800	0.3504	N/A	0.0800	0.3504	0.0050	0.0050
VOC	0.0044	0.1056	0.0193	0.0044	0.0193	N/A	0.0044	0.0193	0.0003	0.0003
CO	0.0672	1.6128	0.2943	0.0672	0.2943	N/A	0.0672	0.2943	0.0042	0.0042
LEAD	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0.0000	0.0000	0.0000	0.0000

***This source is class Registration according to potential emissions.**

Hammond Air Quality Control Ordinance No. 3522 (as amended)